

### **IN THE SPECIFICATION:**

Replace the paragraphs beginning at line 20 of page 10 through line 6 of page 12 with the following paragraphs:

--Referring to FIG. 4, a rotary body 40 according to the first embodiment of the invention can be equivalently applied to the furnace and the cooling unit. The rotary body 40 is shaped as a hollow cylinder, and has slits 41 linearly extended along the longitudinal direction of the optical fiber. The slits 41 are provided symmetrically. The rotary body 40 shown in FIG. 4 has gas-communicating openings 42, which communicate with the gas feeding sections to allow gas passage. The openings 42 are preferably arranged symmetrically along the radial direction. The openings 42 are extended toward the center of the rotary body 40, and are fed with gas from respective positions axially around the upper gas feeding section 72 as shown in FIGs. 7 and 8. In addition, the openings preferably communicate with the slits 41 for effective polarization mode dispersion.

Referring to FIG. 5, a rotary body 50 according to the second embodiment of the invention can be equivalently applied to the furnace and the cooling unit. The rotary body 50 is shaped as a hollow cylinder, and has slits 51 extended along the longitudinal direction of the optical fiber. The slits 51 are extended along a certain angle of inclined direction about the longitudinal direction of the optical fiber. The slits 51 are provided symmetrical. The rotary body 50 shown in FIG. 5 has gas-communicating openings 52, which communicate with the gas feeding sections to allow gas passage. The openings 52 are preferably arranged symmetrically along the radial direction. Here, the openings 52 are extended toward the center of the rotary body 50, and are fed with gas from respective

positions axially around the upper gas feeding section 72 as shown in FIGs. 7 and 8. In addition, the openings preferably communicate with the slits 51 for effective polarization mode dispersion.

Referring to FIG. 6, a rotary body 60 according to the second embodiment of the invention can be equivalently applied to the furnace and the cooling unit. The rotary body 60 is shaped as a hollow cylinder, and has slits 61 extended along the longitudinal direction of the optical fiber. The slits 61 are spirally extended about the longitudinal direction of the optical fiber. The slits 61 are provided symmetrical. The rotary body 60 shown in FIG. 6 has gas-communicating openings 62, which communicate with the gas feeding sections to allow gas passage. The openings 62 are preferably arranged symmetrically along the radial direction. Here, the openings 62 are extended toward the center of the rotary body 60, and are fed with gas from respective positions axially around the upper gas feeding section 72 as shown in FIGs. 7 and 8. In addition, the openings preferably communicate with the slits 61 for effective polarization mode dispersion.--

Replace the paragraph from lines 15-18 of page 12 with the following paragraph:

--Flow rate of the gas fed, by a gas feeder, to the furnace 30 or the cooling unit 70 of the invention is controlled by a flow regulator (not shown), rotation speed of the rotary body with the slits, position of a rotating part, on/off control of the gas feeding ports and kind of the gas are controlled by using a controlling computer. The feeder feeds the gas from an external source.--